

Remarks

The Official Action dated December 1, 2004 has been carefully considered. Consideration of the changes and remarks presented herein and reconsideration of the rejections are respectfully requested.

Claims 1-4, 6-14, 16, 18-26, and 28 remain in the present application, claims 5, 15, 17, have been canceled without prejudice or admission, and independent claim 29 has been added. Claim 29 corresponds with allowed claim 20, in independent form. Applicants are appreciative for the indication that claims 8-11 and 20-23 are allowable, and respectfully submit that new claim 29 is allowable as well.

Claims 1, 3, 4, 6-11, 16, 19-22, 26 and 28 have been amended for purposes of clarifying the claim language. Support for the amendments can be found in the specification, claims and drawings as originally filed. In particular, support for the amendments can be found in the specification at, for example, page 3, line 14 to page 5, line 15, and at page 5, line 31 to page 8, line 9. Accordingly, it is believed that these changes do not involve any introduction of new matter, and entry is believed to be in order and is respectfully requested.

Drawing Objections

The drawings were objected to based upon the position that the following claim elements were not shown in the drawings: "printhead," "plurality of nozzles," "media," "resistor," "firing elements," "two or more capacitors," and "surface mount package." With respect to the term "printhead," it is respectfully submitted that an example of this is being shown as element 120 of FIG. 3, as indicated in the specification on page 8, line 8 of the present application. Regarding the terms "nozzles," "media," "resistor," and "firing elements," FIG. 3 has been amended to show a nozzle from which the ink ejects, a resistor (e.g., a type of firing element) for firing the nozzle, and media onto which the ink is ejected.

Support for the amendments can be found in the specification and claims as originally filed, such as at page 4, line 22 to page 8, line 13, for example, and, accordingly, entry is believed to be in order and is respectfully requested. As for "surface mount package," claims 5 and 17 have been canceled without prejudice. With respect to "two or more capacitors," claims 4 and 16 have been amended to recite at least one capacitor. Applicants therefore respectfully traverse the objections, and have made amendments herein making them moot. Thus, it is respectfully requested that the objections to the drawings be reconsidered and withdrawn.

Claim Objections

Claim 6 was objected to regarding dependency. Claim 6 has been amended as suggested in the Office Action.

Claims 7, 8, 9, 10, and 11 were objected to regarding the words "or capacitor means," and claims 19, 20, 21, 22, and 23 were objected to regarding the words "capacitor or." These phrases have been canceled from the claims as suggested in the Office Action.

Claims 5 and 17 were objected to because of the words "a surface mount package." Claims 5 and 17 have been canceled without prejudice or admission.

Accordingly, reconsideration of the claim objections is respectfully requested.

Specification Objection

In the Office Action, lines 5-7 of page 1 of the specification were objected to. The present amendment cancels these lines, as requested in the Office Action, and therefore it is requested that the objection be withdrawn.

Rejections Under 35 USC § 102

Claims 1, 3, 12-15, and 24-25 were rejected in the Office Action under the argument they are anticipated by Kitazawa (US 5,835,115). Applicants respectfully traverse the rejection. In the Office Action, it is argued that Kitazawa discloses all of the elements of independent claims 1, 3, and 14. However, Applicants submit that not all elements of these claims are taught by Kitazawa. For example, with respect to claim 1, Applicants found no teaching in Kitazawa of a capacitor on the ink jet print head for supplying current to heat the print head resistor to cause the nozzles to fire, the capacitor being secure to the ink jet print head housing.

In fact, Applicants find no teaching in Kitazawa that such a capacitor should or could be located on the printhead. To the contrary, the capacitor 607 of FIG. 7 of Kitazawa, which is cited in the Office Action, is disclosed as being part of head driver 506. (See e.g., Col. 3, line 42 to Col. 4, line 10). This head driver 506 is explicitly shown in FIG. 6 of the reference as being separate from the recording head 2, indicating that it should not be a part thereof. In addition, FIG. 17 of the Kitazawa reference shows various components, including transformer 621 and capacitor 607. One skilled in the art would appreciate that it is not feasible to include a transformer on the printhead, so this drawing shows components that would not be found on the printhead, and, as mentioned, FIGS. 6 and 7 verify that capacitor 607 would not be part of the printhead. Rather, the descriptions in the reference are indicative of a conventional printhead where the only electronic components located on the printhead are the resistors. Applicants found no teaching elsewhere in the reference that a capacitor could or should be placed on the printhead.

Similarly, with respect to claim 3, there is no teaching in Kitazawa of, for example, a capacitor means located adjacent the ink jet print head silicon chip and secured therewith, wherein the capacitor means is configured for supplying current to heat the print head resistor

to cause the nozzles to fire. Likewise, with respect to claim 14, the reference fails to disclose positioning an ink nozzle firing capacitor means on the ink jet print head. Because not all claim elements are disclosed by the cited reference, the rejection is not proper and it is respectfully submitted that it be reconsidered and withdrawn. The § 102 rejections of the dependent claims should be withdrawn for at least these reasons as well.

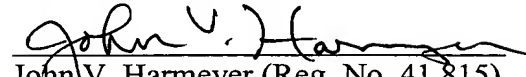
Rejections Under 35 USC § 103

Claims 2, 6, and 18 were rejected under the argument they are unpatentable over Kitazawa in view of admitted prior art; claims 4, 7, 16, and 19 were rejected under the argument they are unpatentable over Kitazawa in view of Schulte (6,567,251); and claims 26 and 28 were rejected under the argument they are unpatentable over Kitazawa in view of Hawkins (5,010,355).

These rejected dependent claims include all of the elements of the respective independent claim from which they depend (claim 1, 3, or 14). As noted above, the Kitizawa reference does not teach certain elements of those independent claims, such as the placement of a current supplying or firing capacitor on a printhead for example. Applicants did not find that the other art cited in this § 103 rejection disclosed these features, for example, nor are these other references cited in the Office Action for showing these features. A §103 rejection is not proper unless the combination of references, even assuming *arguendo* that they could be combined in the manner claimed, teach or suggest all of the claim elements. MPEP § 2143. Accordingly, for at least these reasons, it is respectfully submitted that these rejections be reconsidered and withdrawn.

It is believed that the above represents a complete response to the rejections and that the present application is in condition for allowance. Reconsideration and an early allowance are requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John V. Harmeyer", is written over a horizontal line.

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Amendments to the Drawings:

The attached formal drawing sheet, having FIGS. 3-4, includes changes to FIG. 3. This sheet replaces the original sheet that included FIGS. 3-4. FIG. 3 has been amended in the attached sheet to show the resistor, the nozzle, and the media. Support for the amendments can be found in the specification and claims as originally filed, such as at page 4, line 22 to page 8, line 13, for example. Applicants respectfully request that these amendments be entered. A complete set of formal drawings is also being submitted herewith which are to be substituted for the original drawings, and which includes these changes.

Attachments: One Replacement Sheet